Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

December 11, 2015

Public Health Preparedness and Situational Awareness Report: #2015:48 Reporting for the week ending 12/5/15 (MMWR Week #48)

CURRENT HOMELAND SECURITY THREAT LEVELS

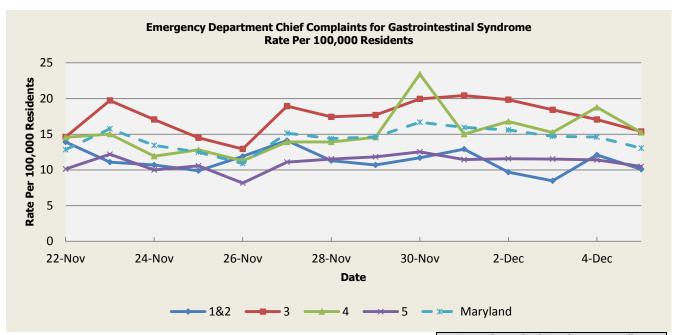
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

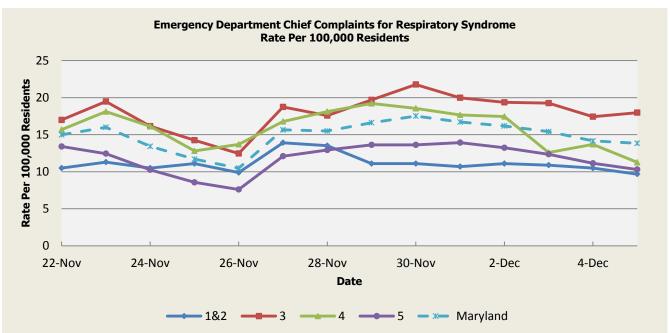
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were no gastrointestinal illness outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	12.89 14.46 15.26 10.16 12.74							
Median Rate*	12.70 14.25 14.57 10.08 12.62							

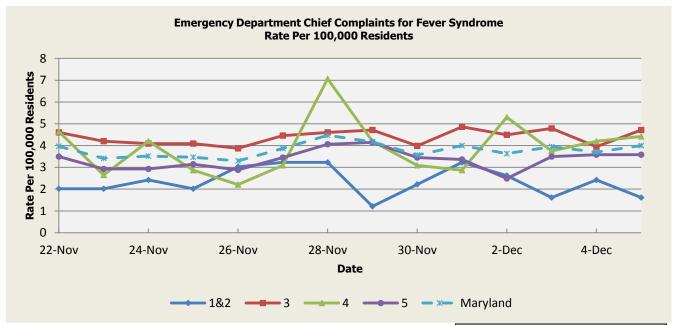
^{*} Per 100,000 Residents



There were no respiratory outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	11.88	13.58	13.77	9.69	11.96		
Median Rate*	11.49	13.08	13.25	9.34	11.56		

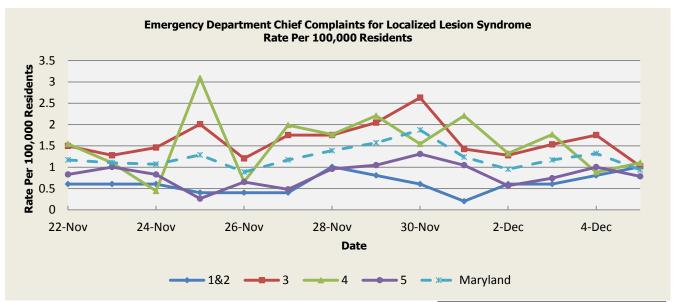
* Per 100,000 Residents



There were no fever outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	3.09	3.68	3.86	3.04	3.40			
Median Rate*	3.02 3.54 3.75 2.97 3.30							

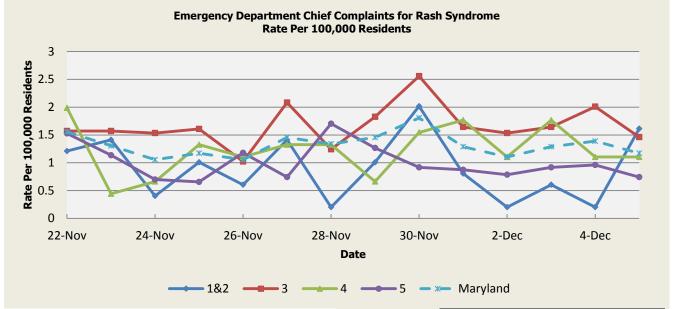
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Maryla						
Mean Rate*	1.09	1.92	0.99	1.51			
Median Rate*	1.01	0.96	1.46				

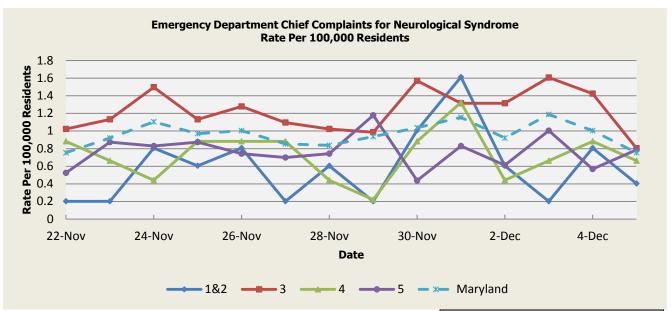
^{*} Per 100,000 Residents



There were two rash outbreaks reported this week: 1 outbreak of scabies associated with a shelter (Region 5), and 1 outbreak of Fifth disease associated with a school (Region 1&2).

	Rash Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	1.32	1.74	1.77	1.05	1.44			
Median Rate*	1.21	1.68	1.77	1.00	1.41			

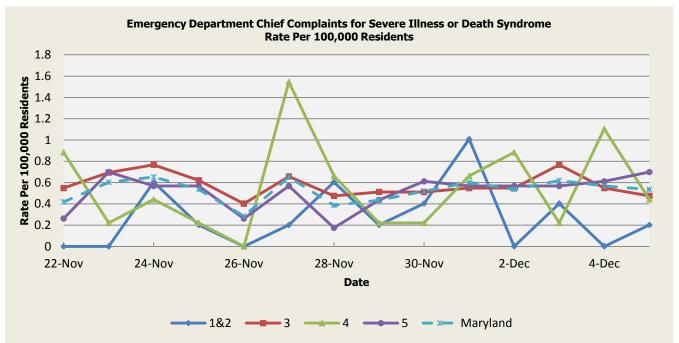
^{*} Per 100,000 Residents



There were no neurological syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Maryland						
Mean Rate*	0.62 0.69 0.63 0.46 0.5						
Median Rate*	0.60 0.62 0.66 0.44 0.55						

^{*} Per 100,000 Residents

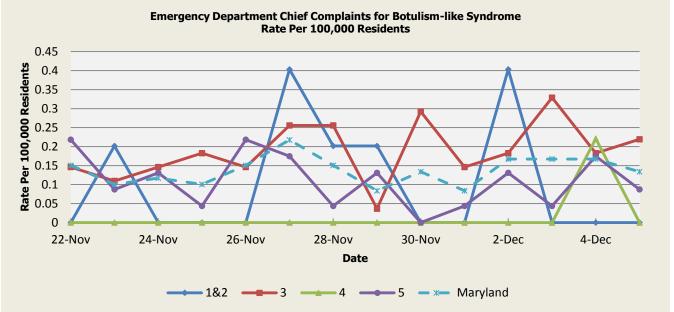


There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Maryland						
Mean Rate*	0.73						
Median Rate*	0.60 0.95 0.88 0.44 0.72						

^{*} Per 100,000 Residents

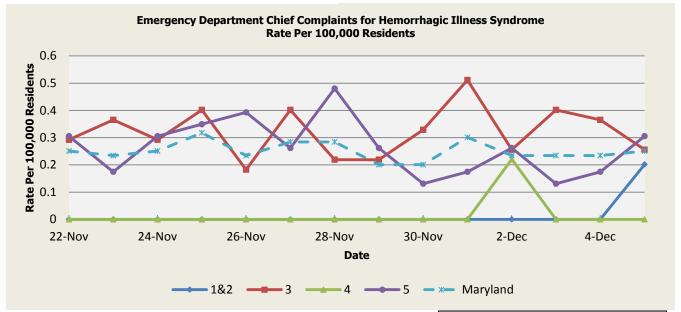
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 11/29 (Regions 1&2,5), 11/30 (Region 3), 12/1 (Region 3), 12/2 (Regions 1&2,3,5), 12/3 (Region 3), 12/4 (Regions 3,4,5), and 12/5 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Mary						
Mean Rate*	0.06	0.07	0.04	0.04	0.06		
Median Rate*	0.00	0.04	0.00	0.04	0.03		

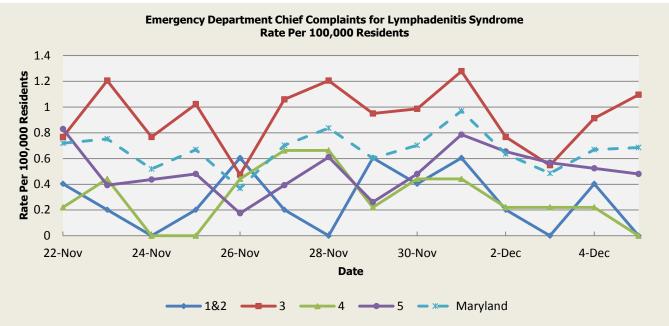
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 11/29 (Regions 3,5), 11/30 (Regions 3,5), 12/1 (Regions 3,5), 12/2 (Regions 3,4,5), 12/3 (Regions 3,5) 12/4 (Regions 3,5), and 12/5 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	5	Maryland		
Mean Rate*	0.03	0.08	0.06	0.06		
Median Rate*	0.00	0.04	0.00	0.04	0.03	

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 11/29 (Region 3), 11/30 (Region 3), 12/1 (Regions 3,5), 12/2 (Region 5), 12/3 (Region 5), 12/4 (Region 3), and 12/5 (Region 3). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.31	0.42	0.34	0.27	0.35			
Median Rate*	0.20	0.33	0.22	0.22	0.30			

^{*} Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡						
Condition		December		Cumulat	ive (Year to	Date)**	
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Aseptic meningitis	5	7	8	442	423.2	443	
Meningococcal disease	0	0.2	0	2	7	7	
Measles	0	0	0	0	0.6	0	
Mumps	0	0	0	21	21	2	
Rubella	0	0	0	1	1.2	1	
Pertussis	0	3.6	2	91	199	199	
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Salmonellosis	1	9	10	780	892	900	
Shigellosis	4	2.2	2	209	154.6	127	
Campylobacteriosis	0	7	8	582	574.2	590	
Shiga toxin-producing Escherichia coli (STEC)	0	1.2	1	82	69.8	66	
Listeriosis	0	0	0	15	15.2	16	
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
West Nile Fever	0	0	0	16	7	6	
Lyme Disease	1	9.6	10	1151	1164.2	1278	
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*	
Chikungunya	0	0.8	0	14	12.6	0	
Dengue Fever	0	0	0	9	10.4	10	
Other	2015	Mean*	Median*	2015	Mean*	Median*	
Legionellosis	0	1.6	1	124	131.2	137	

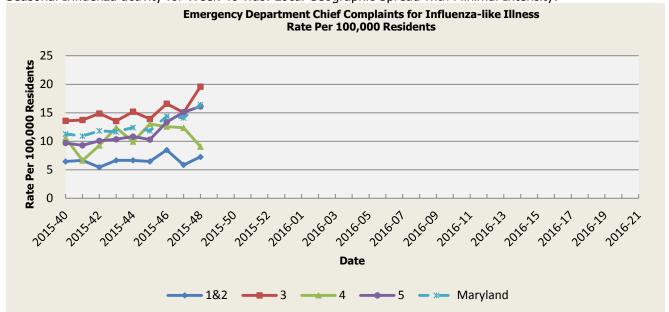
[‡] Counts are subject to change

^{*}Timeframe of 2009-2014

^{**}Includes January through current month

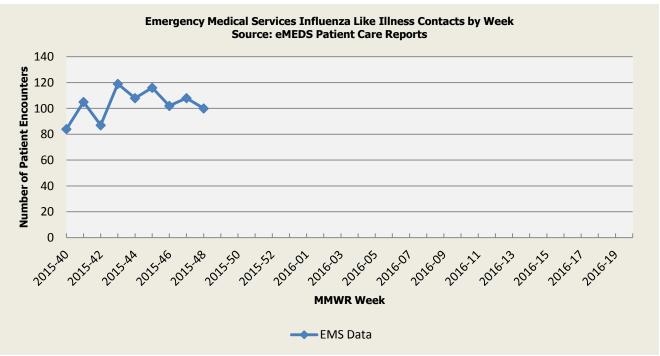
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 48 was: Local Geographic Spread with Minimal Intensity.

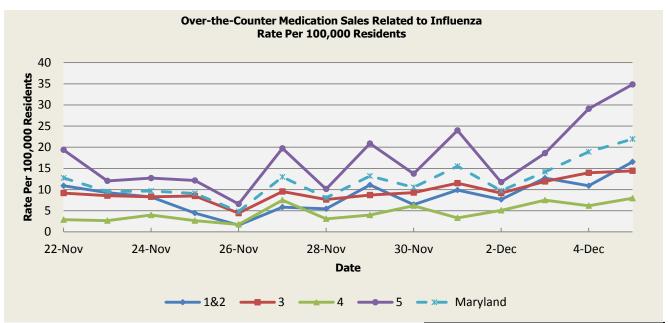


	Influenza-like Illness Baseline Data Week 1 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	9.28	10.82	10.71	9.90	10.33		
Median Rate*	7.46	8.55	8.83	7.64	8.18		

* Per 100,000 Residents



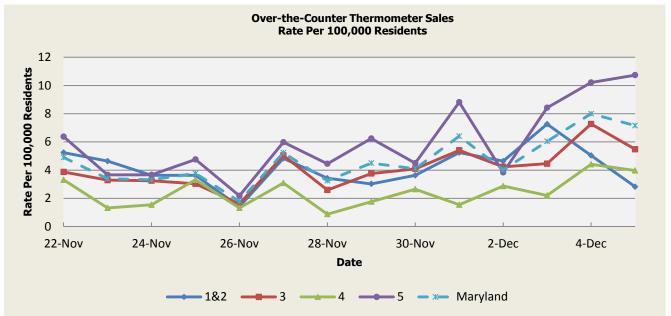
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.



There was an appreciable increase above baseline in the rate of OTC flu medication sales on 11/29 (Region 1&2), 12/3 (Regions 1&2,4), 12/4 (Regions 3,5) and 12/5 (Regions 1&2,3,4,5).

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.45	6.14	3.10	13.82	8.79
Median Rate*	4.23	5.08	2.65	11.35	7.21

* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.62	4.67	3.32	7.68	5.80
Median Rate*	4.84	4.31	3.09	7.07	5.35

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a deescalation of activities towards those in the interpandemic phase may occur. As of <u>November 13, 2015</u>, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 844, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

H7N9 (CHINA): 10 Dec 2015 Since entering autumn 2015, the normally silent avian influenza has appeared again. Cases have been appearing in Hangzhou and neighboring Shaoxing, Wenzhou, etc.(Zhejiang province). Hangzhou Center for Disease Control notes that Hangzhou City has already entered the new season for H7N9 avian influenza. Read More: http://www.promedmail.org/post/3854497

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

Avian Influenza in Poultry:

H5N8 (TAIWAN): 10 Dec 2015 Pingtung County's animal disease control officials on Thu, 10 Dec 2015, culled 8881 ducks after the highly pathogenic bird flu virus H5N8 was found to have infected ducks on a poultry farm in Changzhi Township, officials said. Read More: http://www.promedmail.org/post/3854407

H5N9 (FRANCE): 10 Dec 2015 France's Ministry of Agriculture has announced 4 new outbreaks of HPAI. The surprise comes, however, in a separate announcement that lists 3 HPAI H5 viruses; H5N1, H5N2 and now H5N9. Although several of these outbreaks are not characterized beyond being 'HPAI', 2 are listed as involving H5N9. Read More: http://www.promedmail.org/post/3852573

H5 (FRANCE): 09 Dec 2015 After the Dordogne, avian influenza has affected the department of Landes. The Ministry of Agriculture confirmed Mon 7 Dec 2015, the detection of at least 2 new cases in this department. Highly pathogenic avian influenza virus was discovered in a farm breeding guinea fowl and rearing ducks, with high mortality. A 3rd, nearby farm is suspected. Read More: http://www.promedmail.org/post/3850006

H5N9 (GERMANY): 08 Dec 2015 Laboratory tests have proven the virus detected on a poultry farm is of the low pathogenic variant of the H5N2 avian influenza virus. But even with this variant there is the risk of its developing into a high pathogenic form affecting birds. Therefore, the culling of the poultry on the holding affected was carried out and will be finished on 7 Dec 2015, followed by thorough cleaning and disinfection. Read More: http://www.promedmail.org/post/3847761

NATIONAL DISEASE REPORTS

E. COLI (MULTI-STATE): 05 Dec 2015 A celery recall prompted by an E. coli O157 scare that sickened 19 people in 7 states has now expanded to 18 states and includes more than 155 000 products pulled from shelves at major grocery chains. Read More: http://www.promedmail.org/post/3842045

SALMONELLOSIS (MULTI-STATE): 05 Dec 2015 The epidemiologic evidence available at this time indicates that JEM Raw brand sprouted nut butter spreads are the likely source of this outbreak. The recalled nut butter products have a long shelf life and may still be in people's homes, restaurants, and grocery stores, and illnesses may continue to be reported. Read More: http://www.promedmail.org/post/3842006

INTERNATIONAL DISEASE REPORTS

LEISHMANIASIS (SYRIA): 10 Dec 2015 The total collapse of the Syrian health infrastructure has led to the spread of diseases, including polio, measles, and now, cutaneous leishmaniasis (CL). Read More: http://www.promedmail.org/post/3853674

INFLUENZA (PAKISTAN): 06 Dec 2015 Influenza (H1N1) pdm09 outbreak at Swabi, KPK Pakistan. Read More: http://www.promedmail.org/post/3843544

HEPATITIS A (NEW ZEALAND): 06 Dec 2015 The New Zealand Ministry for Primary Industries (MPI) Director General has issued a statement warning of a potential risk associated with imported frozen berries following 4 human cases of hepatitis A thought to be linked to packaged imported frozen berries. Read More: http://www.promedmail.org/post/3843919

RICIN (INDIA): 05 Dec 2015 As many as 17 children of a family fell ill after consuming castor oil seeds, mistaking them for almonds, and were rushed to a hospital in Ratlam district of Madhya Pradesh on Friday, 4 Dec 2015. Read More: http://www.promedmail.org/post/3843020

SALMONELLOSIS (AUSTRALIA): 05 Dec 2015 A suspected mass outbreak of foodborne illness at a Chinese restaurant at Wenty Leagues is being investigated by the NSW Food Authority. Read More: http://www.promedmail.org/post/3842057

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.md.gov/

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Fax: 410-333-5000

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Lisa B. Stancill, MPH
Biosurveillance Epidemiologist

Office: 410-767-2074 Office: 410-767-5668

Email: <u>Anikah.Salim@maryland.gov</u> Email: <u>Lisa.Stancill@maryland.gov</u>

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Decience 1 % 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

